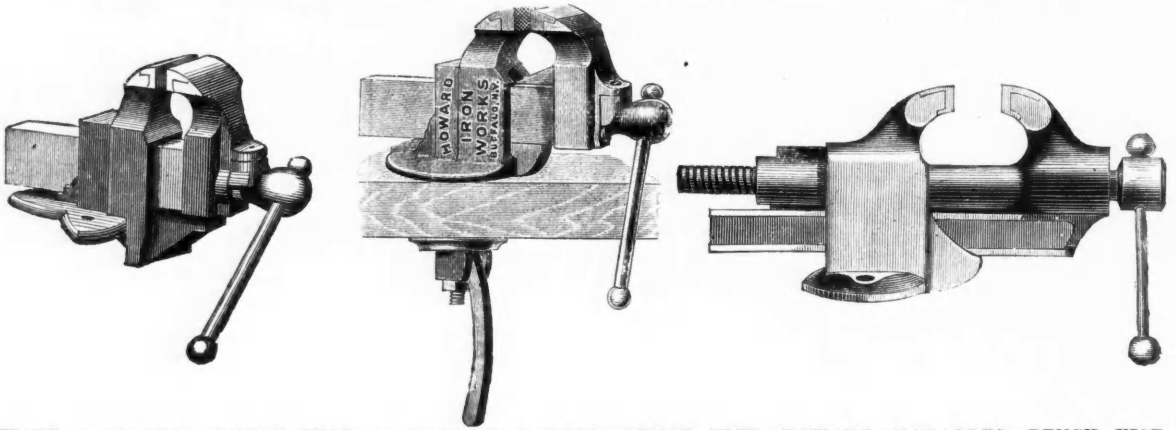


# HOWARD IRON WORKS,

ESTABLISHED 1850.

— BUFFALO, N. Y. —

## BENCH VISES.



HOWARD PARALLEL BENCH VISE.  
FIXED.

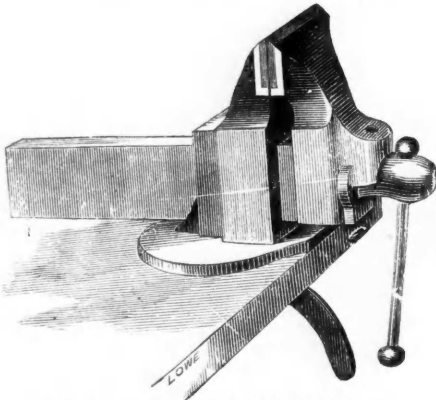
No. 0, Length of Jaw, 3 in., weight, 25½ lbs.	.....\$5.50
" 1, " " 3½ " " 31½ " "	..... 6.50
" 2, " " 4 " " 41 " "	..... 8.50
" 3, " " 4½ " " 52½ " "	..... 10.75
" 4, " " 5 " " 63 " "	..... 16.00
" 5, " " 6 " " 113½ " "	..... 23.75
" 6, " " 7 " " 184 " "	..... 34.50

HOWARD PARALLEL BENCH VISE.  
SWIVEL.

No. 00, Length of Jaw, 2 in., weight, 7½ lbs.	.....\$4.00
" 0, " " 3 " " 31½ " "	..... 6.25
" 1, " " 3½ " " 38½ " "	..... 8.00
" 2, " " 4 " " 48 " "	..... 10.00
" 3, " " 4½ " " 61 " "	..... 13.25
" 4, " " 5 " " 104½ " "	..... 18.50
" 5, " " 6 " " 129 " "	..... 23.00
" 6, " " 7 " " 194 " "	..... 36.00

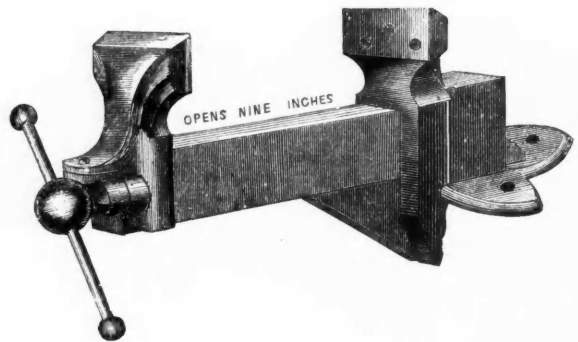
HOWARD PARALLEL BENCH VISE.  
FIXED.

No. 20, 2-inch Jaw	.....\$4.00	.....\$4.50
" 25, 2½ " "	..... 5.00	..... 5.75
" 30, 3 " "	..... 6.25	..... 7.00
" 35, 3½ " "	..... 7.00	..... 8.25
" 40, 4 " "	..... 9.00	..... 10.75
" 45, 4½ " "	..... 11.75	..... 14.00
" 50, 5 " "	..... 16.25	..... 19.25
" 55, 5½ " "	..... 20.00	..... 23.50



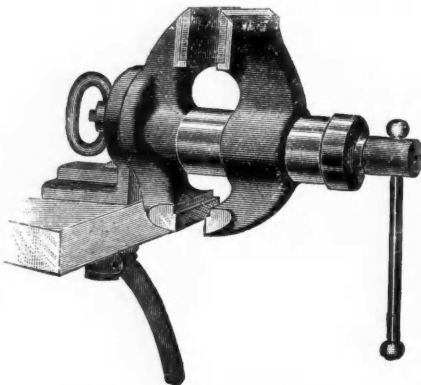
HOWARD COACH MAKER'S VISE.  
SWIVEL.

No. 1, Length of Jaw 4 inches.....\$12.50



HOWARD COACH MAKER'S VISE.  
FIXED.

No. 2, Length of Jaw 4 in., weight 37½ lbs....\$10.00



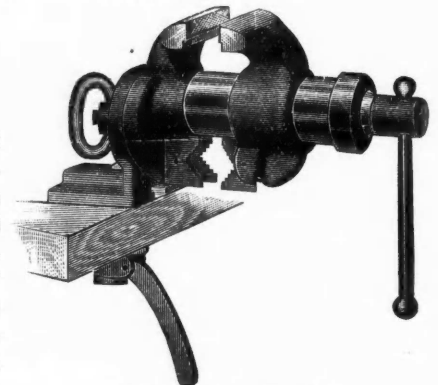
PATENT APPLIED FOR.

UNIVERSAL COMBINATION WHEEL-  
RIGHT AND METAL WORKERS' VISE.

Length of Jaw, 4½ in., opens 4¾ in., weight, 83 lbs.,  
\$15.00.

### UNIVERSAL COMBINATION VISES.

These Vises are very handy mechanical appliances for general use, as they combine two different and separate vises in one. They are made very strong, and will swivel in any direction. The "Combination Pipe and Metal Workers' Vise," for instance, will be found a very useful and practical instrument in every engine room, as the engineer, with the aid of a few pipe tongs and die plates, can, in most cases, do all the small repairing and fitting of pipes, etc., himself.



PATENT APPLIED FOR

UNIVERSAL COMBINATION PIPE AND  
METAL WORKERS' VISE.

No. 102, Length of Jaw, 4½ in., opens 4½ in., and will take from ¾ in. diameter to 3 in. pipe; weight, 80 lbs.....\$15.00  
No. 103, 3-in. Jaw, opens 4¼ in., and will take from ¾ in. to 2 in. diam. pipe, wt., 52 lbs.\$12.00

These Vises have been manufactured by us since 1865 and meet with general favor. They are strong and simple. Every Vise Warranted. Liberal discount to the Hardware Trade. Orders solicited.

**Howard Iron Works, Buffalo, N. Y.**